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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/046,066	01/15/2002	David Tye	021878.0002US1	2831

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EXAMINER

CHIN, PAUL T

ART UNIT PAPER NUMBER

3652

DATE MAILED: 07/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/046,066

Applicant(s)

TYE, DAVID

Examiner

PAUL T. CHIN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 9-11, 13, 14 and 19-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-7, 10, 11, 13, 14 and 19-29 is/are rejected.
- 7) ☐ Claim(s) 2 and 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Priority

1. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 119(e) as follows: the applicant filed a provisional application 60/247,331, and this application was filed on January 15, 2002, which is more than one year. Therefore, applicant's claim for domestic priority under 35 U.S.C. 119(e) is denied.

Election/Restrictions

2. Applicant's election without traverse of the Group I, readable on claims 1-7,9-11,13,14, and 19-29, in the reply filed on April 26, 2004, is acknowledged. Note that applicant cancels claims 8,12, and 15-18.

Oath/Declaration

3. The oath or declaration is missing in the application and a new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not state that the person making the oath or declaration believes the named inventor or inventors to be the original and first inventor or inventors of the subject matter which is claimed and for which a patent is sought.

It does not state that the person making the oath or declaration has reviewed and understands the contents of the specification, including the claims, as amended by any amendment specifically referred to in the oath or declaration.

It does not state that the person making the oath or declaration acknowledges the duty to disclose to the Office all information known to the person to be material to patentability as defined in 37 CFR 1.56.

The clause regarding "willful false statements ..." required by 37 CFR 1.68 has been omitted.

It does not identify the citizenship of each inventor.

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It does not identify the city and either state or foreign country of residence of each inventor. The residence information may be provided on either on an application data sheet or supplemental oath or declaration.

Drawings

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "pressure sensor" (Claims 4,10,12), "interface" (claims 2,9), and "a motorized base" (claims 3,6,7, and 11) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact

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terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 3,4,6,7,11,13, and 14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It is not clearly understood as to how "the plurality of claws" are mounted to "a motorized base" which enable the claws to grip. The detailed structure of the movement of the claws and the motorized connection must be described in the specification and the drawings. Moreover, it is not clearly understood as to how "the pressure sensor" (not shown) is coupled to the claws (224) and the related shoulder pad (230).

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. Claims 3,4,6,7,11,13,14, and 19-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The exact meaning of the claimed language "*a motorized base*" (claims 3,6,7, and 11) is not clearly understood as to whether the "motorized" refers to "a drive" (222,226) or "other structural elements". The word "motor" is not found in the specification. Applicant describes "the drive (222) that can be powered with any

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convenient manner: electrical, hydraulic, and pneumatic" (see paragraph 14).

The applicant argues in the amendment that the "motorized base is that which provide power to the drive". The argument is not persuasive. It still is not clearly understood as to how "a motorized base" provides power to the drive. In contrary to the argument, it is a motor or a piston or a drive that causes a plurality of claws or grippers to open and close it's grip. Therefore, the claimed language "motorized base" is misleading.

Moreover, there is no antecedent basis for "said motorized base" (claim 11, line 2). Further, the exact meaning of the phrase "the first container blocks removal of the second container by the device" (claim 19, lines 4) is not clearly understood as to how the "first container" blocks "the second container." The claimed language is vague and indefinite.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 1 and 5, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Tolsma (2,924,484).

Tolsma (2,924,484) discloses a gripping and loading device, comprising a frame having a first (1) and a second (14) parallel elongated support structure; a first

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set of gripping heads (31,31) (Fig. 3) mounted on the first support structure; a plurality of shoulder pads (33,33) (Fig. 3) adjacent the first gripping head; a plurality of substantially extendable and pivotal arms (2,2) mounted on the second support structure; and a second set of gripping heads (20,20) mounted on an end of the extendable arms; a base (36,40); and a plurality of claws (34,34) (Figs. 6 and 7) mounted on the base; and a method for loading and unloading a plurality of barrels. Tolsma's gripping and loading device and method (2,924,484) contains all the structural elements while the intended use (i.e. loading and unloading bottles) is not patentably significant.

12. Claims 11 and 13, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Vo et al. (5,366,340).

Vo et al. (5,366,340) discloses a device for gripping a cylinder object (5), comprising an end effector, a plurality of claws (16,16) gripping the object from the neck, mounted on a motorized base (Figs. 1 and 4A), a pressure sensor provided on the device (Col 4, lines 46-56).

13. Claims 11 and 13, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Graffin (6,073,667).

Graffin (6,073,667) discloses a device for gripping a bottle (50), comprising a plurality of claws (21,21) gripping the neck of a bottle, mounted on a rotary base (40) (Col 2, lines 31-41), a carousel type which has a conventional driving the base to rotate, a weight sensor (Col 2, lines 46-49) for sensing the amount of the stress created on the device.

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14. Claims 19-29, as best understood, are rejected under 35 U.S.C. 102(e) as being anticipated by Grams et al. (6,371,717).

Grams et al. (6,371,717) discloses a plurality of water bottle gripping and loading device, comprising a rack having a first cell (50,52) storing a first container (Figs. 7), a second cell (30,40) storing a second container (20a,b), the first container blocking the second container, the device having a substantially extending arm (12,14) (see Figs. 7-11), a first set of gripping heads (140,140) mounted on the frame; a plurality of shoulder pads (146,146) surrounding each of the gripping heads (see Figs. 4-6); and a second set of gripping heads (140,140) (see Fig. 2) adjacent to the first set of gripping heads having a base (see Figs. 5a and 5b) and a plurality of claws (142,142) (Fig. 5a) mounted on the base wherein the claws are controlled by the robotic control system (16) Col 7, lines 47-53).

Grams et al.' gripping and loading device (6,371,717) further shows sensors on the mechanism (140) for sensing (see Col 7, lines 47-53).

Re claims 26 and 28, Grams et al.' gripping and loading device (6,371,717) further shows that the maximum diameter of the loading arm (12 or 14) is less than the maximum diameter of the container (20a).

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claim 10, as best understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over Tolsma (2,924,484) in view of Vo et al. (5,366,340).

Tolsma's gripping and loading device and method (2,924,484), as presented in section 11 above, does not show a pressure sensor for sensing.

However, Vo et al. (5,366,340) discloses a *pressure sensor* provided on the device (Col 4, lines 46-56). Accordingly, it would have been an obvious to one skilled on the art to provide a *pressure sensor* on the gripping jaws (31,33) of Tolsma's gripping and loading device as taught by Vo et al. (5,366,340) in order to sense the weight of the lifted object.

15. Claim 14, as best understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over Graffin (6,073,667) in view of Land, III (5,284,375).

Graffin's gripping device (6,073,667), as presented in section 13 above, does not show a pad mounted on each jaw. However, Land, III (5,284,375) shows a pad (110) provided on each gripping jaw (40) (Figs. 4 and 5). Accordingly, it would have been an obvious to one of the ordinary skill in the art at the time the invention was made to provide a pad on each jaw (21) of the Graffin's gripping device (6,073,667) as taught by Land, III (5,284,375) in order to prevent the damaging on the neck of the bottle.

Allowable Subject Matter

16. Claims 2 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

17. Claims 3,4,6, and 7 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Response to Arguments

18. Applicant's arguments with respect to claims 1-7, 9-11, 13, 14, and 19-29 have been considered (except Tolsma (2,924,484) but are moot in view of the new ground(s) of rejection. Applicant argues that "Tolsma does not recites extendable arms" and "the extendable means that the length of the arms." The argument on the prior art is not persuasive. One of the meanings of the word "extendable" is defined as *"to exert (oneself) vigorously or to full capacity: Few mountain climbers have extended themselves as those two have; or to cause to move at full gallop. Used of a horse"*, according to *The American Heritage® Dictionary of the English Language, Third Edition*. Any pivotal arm can extend (not necessary to the length of arm) by reaching it's full capacity. Therefore, the arms (2,2) of Tolsma are substantially extendable (to some extent) to grip an object.

Conclusion

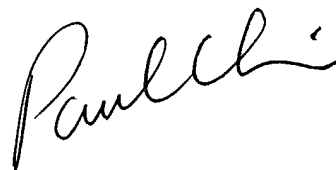
19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAUL T. CHIN whose telephone number is (703) 305-1524. The examiner can normally be reached on MON-THURS (7:30 -6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, EILEEN LILLIS can be reached on (703) 308-3248. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9326 for regular communications and (703) 872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-1113.

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A handwritten signature in black ink, appearing to read "Paul T. Chin". The signature is fluid and cursive, with a large initial "P" and a distinct "Chin" at the end.

PAUL T. CHIN
Examiner
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